

TOOL CASE

BACKGROUND OF THE INVENTION

1. Field of the Invention

The present invention relates to a tool case, and more particularly to a tool case with at least one baffle pivotally attached to a body to hold tools in cavities defined in the body.

2. Description of Related Art

Tool cases are used to conveniently carry tools. A conventional tool case comprises a body and a cover pivotally attached to the body. Multiple cavities are defined in the body and the cover to hold tools, and each has an inner surface such that the tools can be conveniently carried in the tool case.

To keep tools from escaping from the cavities, a positioning device is mounted in the inner surface of each cavity. A conventional positioning device in accordance with the prior art comprises multiple protrusions formed on the inner surface of the cavity to abut a tool that is stored in the cavity.

However, removing the tool from the cavity with a conventional positioning device requires a large force to push away the protrusions, and that is difficult. a tool with a smooth outer surface such as a socket for a ratchet wrench is especially difficult to remove from a cavity.

To overcome the shortcomings, the present invention provides a tool case to mitigate or obviate the aforementioned problems.

SUMMARY OF THE INVENTION

The main objective of the invention is to provide a tool case from which tools can be removed conveniently from cavities in the tool case in which the

1 tools are stored. The tool case has a body, at least one baffle and a positioning
2 device. The body has a recess with a bottom and multiple cavities defined in the
3 bottom of the recess for storing tools. The at least one baffle is pivotally attached
4 to the body with a pivot pin, is mounted in the recess and corresponds to the
5 cavities in the body. The positioning device is mounted in the inner surface of the
6 cavity for positioning the at least one baffle relative to the body. Accordingly, the
7 tools can be kept from escaping from the cavities with a blocking effect provided
8 by the at least one baffle plate a positioning device does not need to be formed in
9 each respective cavity. Therefore, the tools can be easily and conveniently
10 removed from the corresponding cavities.

11 Other objects, advantages and novel features of the invention will
12 become more apparent from the following detailed description when taken in
13 conjunction with the accompanying drawings.

14 BRIEF DESCRIPTION OF THE DRAWINGS

15 Fig. 1 is a perspective view of a first embodiment of a tool case in
16 accordance with the present invention;

17 Fig. 2 is an operational perspective view of the tool case in Fig. 1
18 showing the baffle opened relative to the body;

19 Fig. 3 is an enlarged cross sectional side plan view of the tool case in Fig.
20 1;

21 Fig. 4 is a perspective view of a second embodiment of a tool case in
22 accordance with the present invention;

23 Fig. 5 is a perspective view of a third embodiment of a tool case in
24 accordance with the present invention; and

1 Fig. 6 is a perspective view of a fourth embodiment of a tool case in
2 accordance with the present invention.

3 DETAILED DESCRIPTION OF PREFERRED EMBODIMENT

4 With reference to Figs. 1 to 3, a first embodiment of a tool case in
5 accordance with the present invention comprises a body (10), a cover (20), a first
6 baffle (30), a positioning device (not numbered). The body (10) has a top (not
7 numbered), a recess (12), multiple cavities (122) and a handle (14). The recess
8 (12) is defined in the top and has an inner surface (not numbered) and a bottom
9 (not numbered). The cavities (122) are defined in the bottom of the recess (12) to
10 hold tools (not numbered). the handle (14) is formed on the body (10) for a user
11 to conveniently carry the tool case. The cover (20) is pivotally attached to the
12 body (10).

13 The first baffle (30) is pivotally attached to the body (10) with a pivot
14 pin (not numbered) and is selectively received in the recess (12). The first baffle
15 (30) covers the cavities (122) in the body (10), has a board (not numbered), a
16 resilient connector (32) and a hole (34). The board has edges (not numbered) and
17 a thickness and is pivotally attached to the body (10). The resilient connector (32)
18 is formed on the board along the pivot pin and has a thickness smaller than that
19 of the board. The connector (32) provides a compressible resilience to the first
20 baffle (30). The hole (34) is defined through the board.

21 The positioning device is mounted on the inner surface of the recess
22 (122). The positioning device comprises multiple protrusions (not numbered)
23 formed on the inner surface of the recess (122) to abut the edges of the board.
24 With the abutment of the protrusions, the first baffle (30) will not pivot and will

1 be held closed relative to the body (10). Accordingly, the tools will be held in the
2 cavities (122) by the first baffle (30).

3 If a person wants to use a tool in the tool case, the first baffle (30) is
4 disengaged from the positioning device on the body (10) by pulling the hole (34)
5 in the first baffle (30) away from the body (10). In addition, the compressible
6 resilience provided by the connector (32) slightly reduces the planar area of the
7 board of the first baffle (30) when the first baffle (30) is pulled. This allow the
8 first baffle (30) to disengage more easily from the positioning device. With the
9 first baffle (30) open, the tools can be removed from the cavities (122) for use.
10 Furthermore, forming a positioning device in each cavity is unnecessary, and the
11 tools can be easily and conveniently removed from the cavities (122).

12 With reference to Fig. 4, a second embodiment of the tool case in
13 accordance with the present invention has a cover (20') with a top (not
14 numbered), a recess (not numbered), multiple cavities (not shown) and a handle
15 (not numbered). The recess has a bottom and is defined in the top of the cover
16 (20'). The multiple cavities (not shown) defined in the bottom of the recess to
17 hold tools. The handle is formed on the cover and corresponds to the handle
18 formed on the body. The cover is pivotally attached to the body at an edge away
19 from the handle.

20 A second baffle (40) is pivotally attached to the cover (20') with a pivot
21 pin and is selectively received in the recess in the cover (20'). The second baffle
22 (40) corresponds to the cavities in the cover (20') to hold the tools in the cavities.
23 The second baffle (40) has a structure the same as the first baffle (30) on the body
24 (10) and comprises a board (not numbered), a resilient connector (not numbered)

1 and a hole (not numbered). A second positioning device (not shown) is mounted
2 on the inner surface of the recess in the cover (20') to hold the second baffle (40)
3 closed relative to the cover (20'). The second positioning device has a structure
4 the same as the positioning device mounted on the body (10) and is not further
5 described. With the cavities defined in the cover (20'), the space for storing tools
6 in the tool case is enlarged.

7 With reference to Fig. 5, a third embodiment of the tool case in
8 accordance with the present invention has two body baffle (30') pivotally
9 attached to the body (10) and corresponding respectively to two groups of
10 cavities (122) in the body (10). The body baffles (30') may be made optionally of
11 a transparent material. Accordingly, a person can see the tools stored in the
12 cavities (122) through the body baffled (30') and open the appropriate body
13 baffle (30') to retrieve a desired tool.

14 In an alternative embodiment of the tool case in accordance with the
15 present invention, two cover baffles (not shown) can be mounted on the cover
16 (20) when cavities (not shown) are defined in the cover (20) for storing tools.

17 With reference to Fig. 6, because the baffle (30'') can be held in position
18 relative to the body (10') to hold the tools in the cavities, the baffle (30'') can
19 serve as a cover. Therefore, attaching a cover (20) to the body (10) as described
20 in the first embodiment of the tool case is not needed, and the structure of the
21 tool case is simplified.

22 Even though numerous characteristics and advantages of the present
23 invention have been set forth in the foregoing description, together with details
24 of the structure and function of the invention, the disclosure is illustrative only,

1 and changes may be made in detail, especially in matters of shape, size, and
2 arrangement of parts within the principles of the invention to the full extent
3 indicated by the broad general meaning of the terms in which the appended
4 claims are expressed.